

1. Explain Cisco Wireless Technology.

Ans: Cisco wireless technology wireless access point (AP) vapri ne devices ne connect kare che. Wireless controller thi AP manage thai che.

2. List of IEEE standard.

Ans: IEEE 802.3 – Ethernet

IEEE 802.11 – Wi-Fi

IEEE 802.1Q – VLAN

IEEE 802.1D – Spanning Tree Protocol

3. Explain Wireless Topologies.

Ans: Infrastructure Mode – AP thi connect thay

Ad-hoc Mode – Device to device direct connect

Mesh – AP to AP connect kare che, redundancy mate

4. Explain Wireless Security Protocol and Encryption method type.

Ans:

Protocols:

WEP (Weak)

WPA

WPA2 (Strong)

Encryption Methods:

TKIP

AES (Advanced Encryption Standard)

5. Example of DHCP Configuration.

Ans: ip dhcp pool LAN

network 192.168.1.0 255.255.255.0

default-router 192.168.1.1

dns-server 8.8.8.8

6. What is ACL? Types and Example of Extended ACL.

Ans: ACL (Access Control List) etle filter rules

Types:

Standard ACL – Only source IP

Extended ACL – Source, destination, protocol, port

Example (Extended):

access-list 100 permit tcp 192.168.1.0 0.0.0.255 any eq 80

7. Example of Port Security in Switch.

Ans:interface fa0/1

switchport mode access

switchport port-security

switchport port-security maximum 1

switchport port-security violation shutdown

switchport port-security mac-address sticky

8. List of WAN connection with protocol.

Ans:Leased Line – HDLC, PPP

DSL – PPPoE

MPLS – Label Switching

VSAT – Satellite WAN

Frame Relay – DLCI

9. Explain Frame-Relay and PPP.

Ans: Frame Relay: Layer 2 WAN protocol using DLCI

PPP (Point to Point Protocol): Authentication, error detection support kare che – PAP, CHAP.

10. What is NAT? Explain with one example.

Ans: NAT – Private IP ne public IP ma convert kare che.

Example:

```
ip nat inside source list 1 interface s0/0/0 overload
access-list 1 permit 192.168.1.0 0.0.0.255
```

11. What is HDLC? Which command to show in software?

Ans: HDLC – Cisco default WAN protocol che

Command: show interface serial 0/0/0

→ e display kare HDLC frame protocol

12. What is Encapsulation? Example of GRE Tunnel.

Ans: Encapsulation etle ek protocol ne biji protocol ni under wrap karvu.

GRE Tunnel Example:

```
interface Tunnel0
ip address 10.1.1.1 255.255.255.0
tunnel source 192.168.1.1
tunnel destination 192.168.2.1
```